Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12-20-07 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-14, 18, 20, 27/1, 28/1, 29/1, 31/1, 32/1, 44/1, 45/1, 46 and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,095,647 to Zobele et al. in view of U.S. Patent No. 7,201,916 to Schiavo et al.

Referring to claim 1, Zobele et al. discloses a pest controller comprising a portable container – at C, holding a chemical substance therewithin – see column 5 lines 63-68 and column 6 lines 1-7, the container attachable to a user so as to follow movement of a user without

the portable container having to be held by a user – see figures 1-4 where the container – at C, is of a size that can be placed in a backpack worn by a user, wherein the container comprises a substance exposing portion – at the top of C and at 14'' and at 20, for exposing the chemical substance held therein to atmospheric air – via item 14, and a cover – at 17 – see figures 1-3, for sealing the substance exposing portion – see figure 4, by being repositionable to selectively seal and make the substance exposing portion open – see figure 4, the chemical substance containing an active ingredient with a pest controlling effect – see column 5 lines 63-68 and column 6 lines 1-7, and the active ingredient being volatizable at a normal atmospheric temperatures and as an incident of being exposed to atmospheric air – see figures 1-4 and column 5 lines 63-68 and column 6 lines 1-7, the portable container follows movement of a user, the substance exposing portion is directly exposed to atmospheric air so that with the cover positioned to expose the substance exposing portion, the chemical substance acts to control pests around a user to which the portable container is attached – see figures 1-4. Zobele et al. does not disclose the pest controller comprising attachment structure to attach the portable container to a user in a manner where the portable container follows movement of a user without the portable container having to be held by a user. Schiavo et al. does disclose the pest controller comprising attachment structure – at 326, to attach the portable container – at 302, to a user in a manner where the portable container follows movement of a user without the portable container having to be held by a user - see figure 3A, the substance exposing portion is directly exposed to atmospheric air so that with the cover - at 322, positioned to expose the substance exposing portion, the chemical substance acts to control pests around a user to which the portable container is attached – see figure 3A. Therefore it would have been obvious to one of ordinary skill in the art to take the

device of Zobele et al. and add the container attachable to the user but not held by the user of Schiavo et al. so as to allow for the device to be carried by a user without interfering with any actions made by the user.

Referring to claim 2, Zobele et al. as modified by Schiavo et al. further discloses the chemical substance is contactable with atmospheric air at the substance exposing portion so as to be released into the air therefrom when the cover is open – see at the top of C and 14'' in figures 4-5 of Zobele et al.

Referring to claim 3, Zobele et al. as modified by Schiavo et al. further discloses the substance exposing portion is provided with an applicator – at 14, for applying the chemical substance onto a body – see figures 4-5 of Zobele et al. where item 14 is capable of performing the function of applying the chemical substance to a body.

Referring to claim 4, Zobele et al. as modified by Schiavo et al. further discloses the substance exposing portion is constituted by a member having a porous bundle – at 14, a fibrous bundle – at 14, a member with a through hole – at 20, so that the chemical substance is exposed on a surface thereof – see figures 4-5 of Zobele et al.

Referring to claim 6, Zobele et al. as modified by Schiavo et al. further discloses the chemical substance is directly held within the container – see at C in figure 4 of Zobele et al.

Referring to claim 7, Zobele et al. as modified by Schiavo et al. further discloses the chemical substance has a fluidity – see column 5 lines 63-68 and column 6 lines 1-7 of Zobele et al., and wherein the container further comprises a substance storage – at the bottom of C, containing the substance – see figure 4 of Zobele et al., and a substance lead-out member – at 14, provided between the substance storage and the substance exposing portion – at 20, so as to lead

the substance out of the substance storage through the substance lead out member to the substance exposing portion – see figures 4-5 of Zobele et al.

Referring to claim 8, Zobele et al. as modified by Schiavo et al. further discloses the container – at C, accommodates a substance retaining member – at 14, the chemical substance being capable of flowing and retained in the substance retaining member – see at 14 in figures 4-5 of Zobele et al.

Referring to claim 9, Zobele et al. as modified by Schiavo et al. further discloses the substance retaining member – at 14, is made of fiber – see column 3 lines 25-68 of Zobele et al.

Referring to claim 10, Zobele et al. as modified by Schiavo et al. further discloses the container comprises a storage tank – at the bottom of C, and a temporary receptacle – at 19, for the chemical substance – see figures 4-5 of Zobele et al.

Referring to claim 11, Zobele et al. as modified by Schiavo et al. further discloses the container is of a cylindrical shape – see at C in figure 4 of Zobele et al., wherein the substance exposing portion – at 14,20, is placed at an end of the container of cylindrical shape – see figures 4-5 of Zobele et al.

Referring to claim 12, Zobele et al. as modified by Schiavo et al. further discloses the container further comprises a container body – at C, holding the chemical substance therewithin – see figure 4 of Zobele et al., wherein the body accommodates a substance retaining member – at 14, adapted to absorbing the chemical substance – see figures 4-6 of Zobele et al., the substance retaining member soaked with the chemical substance – see figures 5-6 of Zobele et al., and wherein the body is provided with the substance lead out member – at 20,21, adapted to leading out the chemical substance out of the body – see figures 4-6 of Zobele et al., a proximal

part of the substance lead out member being in contact with the substance – via item 14 as seen in figures 5-6 of Zobele et al., and a distal part of the lead out member – at 21, being exposed out of the body – see figure 4 of Zobele et al.

Referring to claim 13, Zobele et al. as modified by Schiavo et al. further discloses the substance exposing portion is adapted to adjusting an exposing area of the chemical substance – see figures 4-6 of Zobele et al. where the amount of item 14 at 14'' disposed outside the container – at C, can be adjusted in that the distance – S can be made to different lengths.

Referring to claim 14, Zobele et al. as modified by Schiavo et al. further discloses the substance exposing portion has a window – at the top of 20,21, an opening are of which is changeable – by being open when the wick – at 14 is not in item 20,21 and then being closed when the wick – at 14 is placed into item 20 of Zobele et al.

Referring to claim 18, Zobele et al. as modified by Schiavo et al. further discloses the body – at C, is provided with a substance lead out member – at 19,20,21, adapted to leading the chemical substance out of the body – see figures 4-6 of Zobele et al., and wherein to the substance lead out member a substance releasing member – at 14,14'', is separately provided is attachable – see figures 4-6 of Zobele et al., the substance releasing member configured and sufficiently flexible – see column 3 lines 25-34 of Zobele et al. that is capable of being wound up or folded to be compacted during non-use – see column 3 lines 25-34 of Zobele et al. where the substance releasing member is made of a flexible material that can be wound or folded up.

Referring to claim 20, Zobele et al. as modified by Schiavo et al. further discloses the container has a deformable portion – at 14, so that the chemical substance inside the container will be brought out by pressing the deformable portion – see at 14 in figures 4-6 of Zobele et al.

Referring to claim 27/1, Zobele et al. as modified by Schiavo et al. further discloses the container further comprises a container body – at C, holding the chemical substance therewithin, and a cap – at 17,18, being separable form the body and being attached to the body so as to constitute the cover – see figure 4 of Zobele et al.

Referring to claim 29/1, Zobele et al. as modified by Schiavo et al. further discloses the container – at 19, has a tabular shape – see figures 5-6 of Zobele et al., and wherein the substance exposing portion is of a planar shape – see at 14 in figures 4-6 of Zobele et al.

Referring to claim 31/1, Zobele et al. as modified by Schiavo et al. further discloses the container – at C of Zobele et al., is adapted to be attached to clothes – via a person holding or touching the container C in which the container would be attached to the clothes of the person via intervening portions of the person's body such as hand and arms,–or see at 362 in figure 3A of Schiavo et al.

Referring to claim 44/1, Zobele et al. as modified by Schiavo et al. further discloses opening the cover – at 17,18, of the controller at a spot for pests so as to volatize the chemical substance containing the active ingredient into the air from the substance exposing portion – at 14, thereby getting rid of harmful pests – see figures 4-6 of Zobele et al.

Referring to claim 45/1, Zobele et al. as modified by Schiavo et al. further discloses contacting the pest controller – at 14'', with a spot – at 5 and/or 20,21, for pests to apply the chemical substance on the spot – at 5 and/or 20/21, as seen in figures 1 and 4-6 of Zobele et al., so as to volatize the chemical substance containing the active ingredient into the air thereby getting rid of harmful pests – see figures 1 and 4-6 of Zobele et al.

Referring to claim 46, Zobele et al. as modified by Schiavo et al. further discloses the pest controller further comprises a lead-out tube – at 19, extending within the container – at C – see figures 4-6 of Zobele et al., that communicates the chemical substance towards the substance exposing portion – see figures 4-6 of Zobele et al.

Referring to claim 48, Zobele et al. as modified by Schiavo et al. further discloses holding the pest controller in the hand of the user and opening the cover – at 17,18, of the pest controller at a spot for pests so as to volatilize the chemical substance containing the active ingredient into the air from the substance exposing portion, thereby getting rid of harmful pests – see figures 1-4 of Zobele et al.

Referring to claim 49, Zobele et al. as modified by Schiavo et al. further discloses holding the pest controller in the hand of a user and contacting the pest controller with a spot for pests to apply the chemical substance on the spot so as to volatilize the chemical substance containing the active ingredient into the air, thereby getting rid of harmful pests – see figures 1-4 of Zobele et al.

Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,286,754 to Jones in view of Zobele et al. and Schiavo et al.

Referring to claim 1, Jones discloses a device comprising a portable container – at 16, holding a chemical substance therewithin – see column 4 lines 18-68 and column 5 lines 1-64, the container attachable to a user so as to follow movement of a user without the portable container having to be held by a user – see figures 1-2 where the container is of a size that can be placed in a backpack that can be worn by the user, wherein the container comprises a substance exposing portion – at the top of 16 and – at 13, for exposing the chemical substance held therein

to atmospheric air – see figure 2, and a cover – at the top of 16, for sealing the substance exposing portion – see figure 2, the chemical substance containing an active ingredient which is volatizable at a normal atmospheric temperature and as an incident of being exposed to atmospheric air – see column 4 lines 18-68 and column 5 lines 1-64. Jones does not disclose the active ingredient has a pest controlling effect. Zobele et al. does disclose the active ingredient has a pest controlling effect see column 5 lines 63-68 and column 6 lines 1-7. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Jones and add the active ingredient having a pest controlling effect of Zobele et al., so as to allow for the device to protect against unwanted insects/pests. Jones does not disclose the pest controller comprising attachment structure to attach the portable container to a user in a manner where the portable container follows movement of a user without the portable container having to be held by a user. Schiavo et al. does disclose the pest controller comprising attachment structure – at 326, to attach the portable container – at 302, to a user in a manner where the portable container follows movement of a user without the portable container having to be held by a user - see figure 3A, the substance exposing portion is directly exposed to atmospheric air so that with the cover - at 322, positioned to expose the substance exposing portion, the chemical substance acts to control pests around a user to which the portable container is attached – see figure 3A. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Jones and add the container attachable to the user but not held by the user of Schiavo et al. so as to allow for the device to be carried by a user without interfering with any actions made by the user.

Referring to claim 5, Jones as modified by Zobele et al. and Schiavo et al. further discloses the substance exposing portion – at 13, is constituted by a ball member – see at 18-22 in figure 3 of Jones.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,501,033 to Wefler.

Referring to claim 15, Zobele et al. as modified by Schiavo et al. further discloses a substance lead out member – at 14, adapted to lead the chemical substance out of the body – see figures 4-6 of Zobele et al. Zobele et al. as modified by Schiavo et al. does not disclose a valve system being open by a predetermined operation, whereby the chemical substance inside creeps through the substance lead out member so as to be exposed out of the body. Wefler does disclose a valve system – at 28,30,40-46, being open by a predetermined operation – see at 46 in figures 3-4, whereby the chemical substance inside creeps through the substance lead out member – at 18, so as to be exposed out of the body – see via 20 in figures 3 and 4. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the valve of Wefler, so as to control the flow of the liquid substance through the device.

Referring to claim 16, Zobele et al. as modified by Schiavo et al. does not disclose the chemical substance has a proximal end and the substance holder having a follower at the proximal end of the chemical substance moving according to a consumption of the chemical substance. Wefler does disclose the chemical substance has a proximal end – see at 48 in figures 3-4, the substance holder having a follower – at 46, at the proximal end of the chemical

substance – depending on the level of the chemical substance in the device, moving according to a consumption of the chemical substance – see figures 3-4 and column 4 lines 11-58. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the follower of Wefler, so as to control the flow of the liquid substance through the device.

Referring to claim 17, Zobele et al. as modified by Schiavo et al. and Wefler does not disclose the follower is gel. However, applicant does not disclose that the follower being made of gel is critical to the operation of the invention and therefore it is deemed that the device of Zobele et al. as modified by Schiavo et al. and Wefler is capable of performing equally as well with the follower being made of gel. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and Wefler and add the follower made of gel, so as to control the flow of the liquid substance through the device.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 1 above, and further in view of Lhoste et al.

Referring to claim 19, Zobele et al. as modified by Schiavo et al. further discloses a container body – at C, holding the chemical substance therewithin – see figure 4, and an attachment – at 17,18, detachable form the body and attachable to the body in at least two ways of attachment, so as to hold a liquid chemical substance with fluidity therewithin and wherein the body is provided with a substance lead out member – at 14, adapted to leading the chemical substance out of the body – see figure 4 of Zobele et al., the attachment being provided with a cover – at 17, for sealing the substance lead out member – see figure 4 of Zobele et al., and a substance releasing member – at 14'', for helping releasing the chemical substance – see figures

4-6 of Zobele et al., the substance lead out member being sealed by attaching the attachment to the container in one particular position – see the dotted lines – at 17-18 in figure 4 of Zobele et al., and the chemical substance being supplied to the substance releasing member from the substance lead out member so as to be exposed to ambient air by attaching the attachment to the container body in another particular position – such as being unthreaded to the upper portion of C at item 16 as seen in figure 4. Zobele et al. as modified by Schiavo et al. does not disclose the chemical substance being supplied to the substance releasing member from the substance lead-out member so as to be exposed to ambient air by attaching the attachment to the container body in another particular position, the attachment having spaced ends each of which is selectively attachable to the container body, the attachment in the one particular position with one of the spaced ends of the attachment attached to the container body, the attachment body in the another particular position with the other of the second ends of the attachment attached to the container body. Lhoste et al. does disclose the chemical substance being supplied to the substance releasing member – at M, from the substance lead-out member – at 1, so as to be exposed to ambient air by attaching the attachment – at 10, to the container body – at 11,16, in another particular position – see figures 4 and 7, the attachment having spaced ends – see at either end of item 10 in figure 5, each of which is selectively attachable to the container body – see figures 4 and 7, the attachment in the one particular position with one of the spaced ends of the attachment attached to the container body – see figures 4 and 7, the attachment body in the another particular position with the other of the second ends of the attachment attached to the container body – see figures 4 and 7. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the attachment member of

Lhoste et al., so as to allow for the release of the chemical substance to be selectively controlled by the user.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 1 above, and further in view of U.S. Patent No. 6,783,081 to Pedrotti et al.

Referring to claim 21, Zobele et al. as modified by Schiavo et al. does not disclose the container has a pressurizer for increasing the inner pressure of the container so that the chemical substance is brought out. Pedrotti et al. does disclose a pressurizer – at 7, for increasing the inner pressure of the container so that the chemical substance is brought out – see figure 3. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the pressurizer of Pedrotti et al., so as to allow for the chemical substance to be quickly moved from the device to the outside of the device.

Claim 26/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,647,164 to Yates.

Referring to claim 26/1, Zobele et al. as modified by Schiavo et al. does not disclose a heater for heating the chemical substance. Yates does disclose a heater – see column 5 liens 25-31. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the heater of Yates, so as to allow for the chemical substance to more quickly evaporate.

Claim 30/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 1 above, and further in view of U.S. Patent No. 4,621,768 to Lhoste et al.

Referring to claim 30/1, Zobele et al. as modified by Schiavo et al. does not disclose the cover is a deformable sheet, that is removable from the container. Lhoste et al. does disclose a cover – at 3, being a deformable sheet that is removable from the container – at 1 – see figures 4 and 7 and column 2 lines 56-68 where the cover snaps onto the container and thus is deformed to be removed and attached to the container.

Claims 33/1, 40/1, 41/1 and 43/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 1 above.

Referring to claim 33/1, Zobele et al. as modified by Schiavo et al. does not disclose the container is made of a biodegradable resin. However, it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et el al. and add the container made of a biodegradable resin, so as to allow for the device to be more environmentally friendly.

Referring to claim 40/1, Zobele et al. as modified by Schiavo et al. does not disclose the active ingredient has a vapor pressure at 25 degrees C, within a range of 1×10^{-5} mmHg to 5×10^{-3} mmHg. However, it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the active ingredient having a vapor pressure within the range of 1×10^{-5} mmHg to 5×10^{-3} mmHg, so as to allow for the active ingredient to be easily vaporizable.

Referring to claim 41/1, Zobele et al. as modified by Schiavo et al. does not disclose the active ingredient is a pyrethroid compound. However, it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the active ingredient being a pyrethroid compound, so as to allow for the device to be harmful to pests.

Referring to claim 43/1, Zobele et al. as modified by Schiavo et al. does not disclose the chemical substance contains a sublimable dyestuff. However, it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the chemical substance being a sublimable dyestuff, so as to allow for the device to be effective against pests.

Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zobele et al. as modified by Schiavo et al. as applied to claim 46 above, and further in view of Lhoste et al.

Referring to claim 47, Zobele et al. as modified by Schiavo et al. does not disclose the lead out tube comprises an inner tube and an outer tube that surrounds the inner tube. Lhoste et al. does disclose the lead out tube comprises an inner tube – at 11,16, and an outer tube – at 10,14, that surrounds the inner tube – see figures 4 and 7. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Zobele et al. as modified by Schiavo et al. and add the inner and outer tubes of Lhoste et al., so as to selectively control the release of the chemical substance from the device.

Response to Arguments

3. Applicant's arguments with respect to claims 1-21, 26-27, 29-31, 33, 40-41 and 43-49 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID J. PARSLEY whose telephone number is (571)272-6890. The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J Parsley/
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